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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,279	07/18/2003	Kevan Lee Miller	YOR999124US2	4589
23405	7590	05/16/2006	EXAMINER	
HESLIN ROTHENBERG FARLEY & MESITI PC			HARPER, KEVIN C	
5 COLUMBIA CIRCLE			ART UNIT	
ALBANY, NY 12203			PAPER NUMBER	
			2616	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,279

Applicant(s)

MILLER ET AL.

Examiner

Kevin C. Harper

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 17-28, 30 and 33-40 is/are rejected.
- 7) ☒ Claim(s) 13, 15, 16, 29, 31 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Response to Arguments

In view of the appeal brief filed on March 1, 2006, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below. To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Applicant's arguments concerning claim 1, 5, 9 and 12 have been fully considered but they are not persuasive.

1. Applicant argued that Vaman is not enabled to practice lossless recovery of cells. However, the invention of Vaman is directed to reconfiguration of a network where no cells are lost during reconfiguration (abstract, lines 1-3 and 16-18; col. 1, lines 31-34; col. 2, lines 42-45 and 46-51; col. 2, line 66 through col. 6, line 65; col. 7, lines 1-5; col. 8, lines 13-17). The invention is summarized at col. 8, lines 18-40 and is described in detail at cols. 9-16 with reference to figs. 3-6 and 8. Therefore, the Vaman reference provides an enabling disclosure of the invention.

Art Unit: 2616

2. In response to applicant's argument that Vaman and the various recited patents therein (col. 2, line 66 through col. 6, line 65) and Shaffer are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Vaman and the various recited patents of Vaman provide analogous communications systems where reconfiguration takes place with the goal of minimizing disturbance or providing no disturbance to the system. Shaffer provides an analogous communications system that provides real-time data in sequential order after a reconfiguration.

3. In response to applicant's argument that the invention of Vaman and the various recited patents therein (col. 2, line 66 through col. 6, line 65) and Shaffer would be inoperable if combined in the system of Bracho in view of Gai, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

4. Applicant argued that Gai does not determine whether an old or new routing path is to be used in forwarding a message. However, a new routing path is determined to be used after a failure and a reconfiguration takes place (Gai, fig. 3D, steps 342 and 346)

Art Unit: 2616

5. Applicant argued that Shaffer does not disclose using an old path and a new path involved with a reconfiguration. However, in Shaffer, messages are transmitted on both the old path and the new path such that order is preserved (col. 5, lines 49-55).

6. Applicant noted that CS-messages and SC-messages are not disclosed by the combination of references used in the rejection. However, in Bracho, messages sent between the nodes are equivalent to the CS-messages and SC-messages as described in the specification at paras. 64-66, where the CS-messages are transmitted from clients and the SC-messages are transmitted to clients.

7. Applicant's arguments, filed March 1, 2006 concerning claims 2, 13 and 29 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration of claim 2, a new ground(s) of rejection is made in view of Bracho, Gai and Vaman.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 6-10, 17-19, 22-26, 33-37 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bracho et al. (US 5,870,605) in view of Gai et al. (US 6,535,491) and Vaman et al. (US 6,011,780).

8. Regarding claims 1-3, 6-10, 17-19, 22-26, 33-37 and 39-40, Bracho discloses a publish/subscribe system (fig. 1). However, Bracho does not disclose reconfiguring the system. Gai discloses initiating a reconfiguration of a network (col. 11, lines 31-36; fig. 1) and

Art Unit: 2616

reconfiguring the network (col. 12, lines 27-37; fig. 2, items 240), where some messages are not lost during reconfiguration (col. 15, lines 13-16). Further regarding claims 3, 19 and 37, the reconfiguration changes a first routing path between two nodes to a second routing path between the two nodes (col. 7, lines 49-53; fig. 1, items 128 connecting item 122 and item 114). Further regarding claims 6-10, 22-26, 33-35 and 39, the initiation of the reconfiguration comprises forwarding a request from a configuration manager or node to the other nodes of the network (col. 12, lines 57-61; col. 13, lines 33-44), where data structures associated with the nodes are updated to reflect the reconfiguring (col. 13, lines 29-37) for forwarding of subsequent messages. Further regarding claim 17, the system includes a means for initiating reconfiguration (fig. 1, items 114-116 and 120-125; fig. 2, item 232) and a means for reconfiguring the system (fig. 3D, item 234, 236, 238 and 240). Regarding claims 36 and 40, the reconfiguration is performed by a computer program on a computer readable medium (col. 8, lines 35-47). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to reconfigure the publish/subscribe system of Bracho while reducing message loss in order to provide connectivity after a network failure (Gai, col. 2, lines 10-12; col. 5, lines 39-42).

9. Further, Bracho in view of Gai does not explicitly disclose that no messages are lost during reconfiguration (Gai, col. 15, lines 13-16). Vaman discloses a method of reconfiguration where no messages are lost (col. 7, lines 1-5; col. 9, line 66 through col. 10, line 1). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to not lose any messages during reconfiguration in the invention of Bracho in view of Gai in order to prevent disruptions to user communication (Vaman, col. 1, lines 30-35 and 61-66).

Art Unit: 2616

Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bracho in view of Gai and Vaman as applied to claim 3 or 19 above, and further in view of Takano et al. (US 5,600,630).

10. Regarding claims 4 and 20, Bracho in view of Gai and Vaman does not disclose a changing from a first path in a first routing table to a second path in a second routing table in response to a fault. Takano discloses changing from a first path in a first routing table to a second path in a second routing table (fig. 1; col. 7, lines 37-47 and line 59 through col. 8, line 5). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to change from a first path in a first routing table to a second path to a second routing table in the invention of Bracho in view of Gai and Vaman as evidenced by Takano in order to decrease the time for fault recovery (Takano, col. 2, lines 13-17).

Claim 5, 11-12, 14, 21, 27-28, 30 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bracho in view of Gai and Vaman as applied to claims 1, 8, 17, 24 or 36 above, and further in view of Moskowitz (US 5,428,606) and Shaffer et al. (US 6,236,642).

11. Regarding claim 5, 21 and 38, Bracho in view of Gai and Vaman does not disclose an ordering requirement for delivery of messages nor preserving a message order during reconfiguring of the publish/subscribe system. Moskowitz discloses a publish/subscribe system (fig. 1) having an ordering requirement (col. 3, lines 8-10 and 41-44 and 50-52). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide ordered data transmissions in the invention of Bracho in view of Gai and Vaman as evidenced by Moskowitz in order to allow for real-time data transmissions (Moskowitz, col. 1, lines 50-60).

Art Unit: 2616

12. Further, Bracho in view of Gai and Vaman and Moskowitz does not disclose preserving message order during system reconfiguration. Shaffer discloses preserving message order during a system reconfiguration (fig. 1, item 108; fig. 5; col. 2, lines 47-51). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to preserve message order during the system reconfiguration in the invention of Bracho in view of Gai and Vaman and Moskowitz as evidenced by Shaffer in order to avoid the reception of out-of-sequence real-time data (Moskowitz, col. 2, lines 28-34).

13. Regarding claims 11-12, 14, 27-28 and 30, Bracho in view of Gai and Vaman does not disclose an ordering requirement for delivery of messages nor preserving a message order during reconfiguring of the publish/subscribe system. Moskowitz discloses a publish/subscribe system (fig. 1) having an ordering requirement (col. 3, lines 8-10 and 41-44 and 50-52). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide ordered data transmissions in the invention of Bracho in view of Gai and Vaman as evidenced by Moskowitz in order to allow for real-time data transmissions (Moskowitz, col. 1, lines 50-60).

14. Further, Bracho in view of Gai and Vaman does not disclose refraining from delivering a CS-message or SC-message to a node via a new routing path until other messages are delivered to the node from an old routing path (note: a CS-message is a message received at a hub from a publishing broker and a SC-message is a message delivered from a hub to a subscriber - Bracho, col. 5, lines 24-25 and 45-47). Shaffer discloses preserving message order during a system reconfiguration (fig. 1, item 108; fig. 5; col. 2, lines 47-51) by queuing and delaying the reception of packets via a new routing path until packets from an old routing path are received (col. 5, lines 47-55), until a predefined time period expires. Therefore, it would have been

Art Unit: 2616

obvious to one skilled in the art at the time the invention was made to preserve message order during the system reconfiguration in the invention of Bracho in view of Gai and Vaman and Moskowitz as evidenced by Shaffer in order to avoid the reception of out-of-sequence real-time data (Moskowitz, col. 2, lines 28-34).

Allowable Subject Matter

15. Claims 13, 15-16, 29 and 31-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

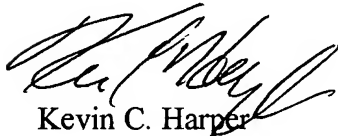
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To, can be reached at 571-272-7629. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov. Previous art units 2661-2668 have merged to form a new art unit 2616. A similar restructuring has taken place for all other art units in TC 2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

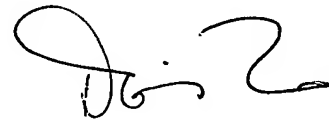
Art Unit: 2616

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

May 8, 2006



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